

REMARKS

Claims 1-20 are pending in this application. Claims 11, 12 and 14 are merely objected to and have been indicated as otherwise allowable over the prior art of record. Claims 1-10, 13 and 15-20 stand rejected, and are at issue herein. Claims 1, 10, 14, 16 and 20 are amended as indicated hereinabove. No new matter has been added by such amendments. Reconsideration of claims 1-10, 13 and 15-20 and indication of the allowability of claims 1-20 at an early date in view of the foregoing amendments and following remarks are respectfully solicited.

The Examiner has rejected claims 1-6, 8, 9, 13 and 15-20 under 35 U.S.C. 103(a) as being unpatentable over Abrams in view of Dick et al. The applicants have thoroughly considered both of these references individually and in combination as proposed by the Examiner, but must nonetheless respectfully traverse this ground of rejection. Reconsideration of claims 1-6, 8, 9, 13 and 15-20 in view of the foregoing amendments and following remarks and indication of their allowability at an early date are respectfully solicited.

While both the Applicants' original specification and the disclosure of Abrams both describe that home HVAC systems require periodic service, and that at such a point the consumer needs to determine who to call to have the system serviced, the approach taken to provide the consumer with such information is vastly different.

Unlike the thermostat of Abrams which requires that the user affirmatively "access" such service contact information, the thermostat of the present invention as claimed in independent claims 1, 16 and 20 provides such information automatically, without requiring the user to take any affirmative steps or initiate any action to try and find this information. As claimed in independent claim 1, this service reminder screen includes at least one field for displaying a name of a service organization and a contact telephone number "automatically at the expiration of a reminder interval". Similarly, the service reminder screen claimed in independent claim 16 is "displayed automatically on the user display" and includes a first field containing information identifying a name of a service organization and a second field containing information identifying a contact telephone number associated with this service

organization identified in the first field. Finally, independent claim 20 requires that the service reminder screen be "automatically displayed" on the user display screen and include at least one field for containing contact information including a name of a service organization.

This automatic display ensures that the user will become aware of the service contact information. Indeed, as described in the original specification, simply providing service contact information at the thermostat is not sufficient for the user to find it. As described in paragraph [0008] of the originally filed specification, when the service contact information is placed under the thermostat cover, "the consumer may not realize that the service contact information is on the underside of the cover, and therefore may not even look in this location in an attempt to determine who to call for service." As such, providing such service contact information at the site of the thermostat, but not automatically displaying such information, e.g. providing the information under the cover of a thermostat or within the programming of the thermostat such as is done by Abrams, is also ineffective to communicate to the consumer the appropriate service contact information.

Turning to the Abrams '560 patent, it is noted that the service contact information is only displayed to the user "on demand" when the user "accesses" such programming, not simply when a problem with a climate control system is detected. See Abrams '560, col. 2, ln. 2-10. Such contact information is described as being "readily (yet inconspicuously) accessible to the user." Id. at col. 5, ln. 25-29. Such is also the case with the sticker placed under the cover of the thermostat described in the Original Specification in paragraph [0008]. However, as described in the originally filed specification, providing any type of service contact information that is normally obscured would be wholly ineffective to communicate this information to the user. See Original Specification ¶[0008].

Indeed, unlike the sticker on the underside of the thermostat cover which requires that the user simply open the cover, to access the service contact information of Abrams '560, the user is required to twice request assistance from the thermostat of Abrams '560. See, e.g., Abrams '560, FIG. 3, block 302 and block 308. Indeed, after the user has once requested assistance with an HVAC problem, only trouble shooting information is provided without service contact information. See Id. at block 304. That is, unless the user thinks to request further assistance, a second request for information after the user has already requested and

received troubleshooting information, the thermostat of Abrams '560 will keep such information inconspicuously hidden from the user.

The Examiner correctly recognizes that Abrams '560 does not teach or even suggest the inclusion or usage of service interval reminders for any of the remotely located HVAC components that this thermostat controls. To provide this teaching, the Examiner again cites to Dick et al. '973. This reference describes a window air conditioning unit having a built in thermostat that is integral with the window air conditioning unit. The integrated thermostat of the window air conditioning unit of Dick et al. '973 does provide a filter usage function for logging and displaying the total usage of the window air conditioner filter. This integrated thermostat within the window air conditioner unit includes an automatic reminder after the filter has been in use for some predetermined period to serve as an indication to clean or replace the air conditioning filter. The Examiner has indicated that it would have been obvious to combine the teachings of Dick et al. '973 with those of Abrams '560 "for the purpose of further assisting the user in making sure the air conditioning system is properly maintained." While the applicants agree that the filter indication on the window air conditioning unit of Dick et al. '973 is for the purpose of insuring proper maintenance of the air conditioning system, the applicants are unclear how this stated purpose supports the combination of these references.

Specifically, the integral thermostat in the window air conditioning unit of Dick et al. '973 already provides the filter change indication for the window air conditioner unit which will insure its proper maintenance. Since an HVAC thermostat does not control window air conditioning units in a dwelling or commercial establishment, the provision of a filter change interval reminder on the HVAC thermostat would, at best, lead to confusion. That is, since a user does not access the HVAC thermostat for any control functionality associated with a window air conditioner unit, the user would not expect to see any service interval reminders for such a unit at that location. Additionally, since the HVAC thermostat does not control the air conditioning unit, it has no idea how long that window air conditioning unit has been in service, and therefore cannot provide reliable information regarding the proper cleaning or maintenance of the filter of the window air conditioning unit.

Further, as discussed above and in the originally filed specification, the problem with providing a service interval reminder on a component of the HVAC system itself is that such components are typically located outside of the dwelling, the basement of the dwelling, or

other infrequently accessed areas. This presents a problem unique to an HVAC system in that the user may not be apprised of the service interval provided on that appliance or component because the user typically does not access or have visual contact with those components. This problem does not exist with a window air conditioning unit that is typically installed in a window within the room where the user will be located. In order to control that window air conditioning unit the user must actually physically interface with that unit, at which point any service interval reminders will be clearly visible to the user. This is not the case with remotely controlled HVAC components. As such, the teachings of Dick et al. '973 are not particularly germane to the issues addressed by the HVAC thermostat of the present invention that controls remotely located HVAC components.

Additionally, the teachings of Dick et al. '973 merely provide, as recognized by the Examiner, the service interval reminder to change the filter. If the user is unable to unwilling to change the filter, the user is still forced to go to the phone book to try and find the name and number of a service company who might be able to provide such service for the window air conditioner. As discussed above and in the originally filed specification, this results in confusion as the typical phone book includes many different HVAC companies.

In view of the failure to teach each and every limitation of the rejected claims, in view of the lack of teaching or suggestion to combine these references, and in view of the lack of a likelihood of success in such a combination, the applicants respectfully submit that a *prima facie* case of obviousness has not been made with regard to these claims. Reconsideration of these claims, as well as the claims dependent thereon, at an early date are respectfully solicited.

Additionally, dependent claim 4 requires that the period of the reminder interval be individually user settable for each of the at least one remotely located HVAC component of the HVAC system. There is no teaching or suggestion in any of the references cited by the Examiner that would allow more than one service interval to be programmed. Specifically, the thermostat of Abrams '560 does not include any teaching or suggestion of any service intervals whatsoever. Instead, it relies on the user to request information. Dick et al. '973 only teaches the setting of a single filter reminder since the programmable thermostat is integral with the window air conditioning unit. Therefore, neither of the references taken alone or in combination teach the requirement of dependent claim 4.

In re Appln. Of: Nicholas Ashworth et al.
Application No.: 10/713,292

The Examiner has also rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Abrams and Dick et al. as applied to claim 1, and further in view of Wehmeyer et al. The applicants have thoroughly considered each of these references individually and in combination as proposed by the Examiner, but must nonetheless respectfully traverse this ground of rejection. Reconsideration of claim 7 in view of the foregoing amendments and following remarks and indication of its allowability at an early date are respectfully solicited.

The applicants respectfully repeat their traversal of the combination of Abrams and Dick et al., and submit that such traversal is not overcome by the additional reference added to reject claim 7. Therefore, the applicants respectfully submit that claim 7 is not obvious for the reasons stated above.

Further, Claim 7 requires that the user function selection means of the thermostat comprises a pair of soft keys located in proximity to the user display screen. The applicants have maintained that soft keys are not well known features of thermostats that would have been obvious to apply to the thermostat of Abrams for the simple purpose of providing convenient data entry.

Despite the applicants' request under MPEP §2144.03 that the Examiner provide a reference to support such a position, the Examiner has cited to Wehmeyer et al. which teaches television system the includes a TV remote control. However, while such soft keys may be known in such TV remote controls, the applicants respectfully submit that the usage of soft keys for inputting a user selection associated with the function indicated on the user display screen of a thermostat for an HVAC system is not commonly used. Instead, as illustrated in the thermostat of Abrams, dedicated function keys are used to provide the programming inputs on thermostats.

In view of the lack of a reference that teaches the use of soft keys on a thermostat, the applicants respectfully submit that claim 7 is not obvious for this additional reason. Reconsideration and allowance of claim 7 for these reasons are respectfully solicited.

The Examiner has also rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Abrams and Dick et al. as applied to claims 1 and 9, and further in view of Schurr et al. The applicants have thoroughly considered each of these references individually

and in combination as proposed by the Examiner, but must nonetheless respectfully traverse this ground of rejection. Reconsideration of claim 10 in view of the foregoing amendments and following remarks and indication of its allowability at an early date are respectfully solicited.

The applicants respectfully repeat their traversal of the combination of Abrams and Dick et al., and submit that such traversal is not overcome by the additional reference added to reject claim 10. Therefore, the applicants respectfully submit that claim 10 is not obvious for the reasons stated above. Reconsideration of this ground of rejection and indication of the allowability of claim 10 at an early date are respectfully solicited.

In view of the above, the applicants respectfully submit that claims 1-10, 13 and 15-20 are in condition for allowance. Reconsideration of claims 1-10, 13 and 15-20 and indication of their allowability at an early date are respectfully solicited.

The Examiner has objected to claims 11, 12 and 14 as being dependent upon a rejected base claim, but has indicated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applicants wish to thank the Examiner for the thorough consideration of these claims, and have adopted the Examiner's suggestion with regard to claim 14 by amending it to independent form including all of the limitations of its base claim and any intervening claims. The applicants respectfully note that this amendment is being made for the purposes of expediency only, and not for any purpose related to patentability. As such, the applicants respectfully submit that this claim is entitled to its full scope and equivalents as if it had been filed in this form in the original application.

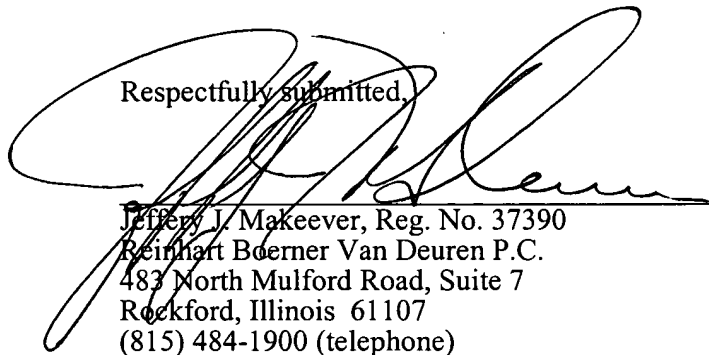
In view of the new fee structure at the USPTO and in view of the applicants position that claims 1, 9 and 10 are not obvious in view of the cited references, the applicants have not amended claims 11 and 12 to independent form at this time.

In view of the above, the applicants respectfully submit that claims 1-20 are in condition for allowance. Reconsideration of claims 1-10, 13 and 15-20 and indication of the allowability of claims 1-20 at an early date are respectfully solicited.

In re Appln. Of: Nicholas Ashworth et al.
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If the Examiner believes that a telephonic conversation will aid in the resolution of any issues not resolved herein, the Examiner is invited to contact the applicants' attorney at the telephone number listed below.

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